INTEGRATION OF WEB 2.0 TOOLS AND THE CALLA METHOD TO ENHANCE
READING AND WRITING SKILLS IN ESL BEGINNER STUDENTS

Presented to
The Graduate Program of
Greensboro College

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts in
Teaching English to Speakers of Other Languages

by
Johanna Kathianny Galindo Caicedo

July 2021

Advisor: Michelle Plaisance

Abstract

The use of new technologies has allowed ESL teachers to create new opportunities to promote communicative skills and the use of authentic language. Many schools and teachers began to use Web 2.0 tools to deliver their lessons virtually to teach remotely during the pandemic. It has recently become a new trend that is being successfully implemented in many classrooms around the world. With Web 2-0 tools, learners can access audiovisual resources, books, activities, and projects created by their teachers. During class, learners engage in different -activities that promote language development and acquire language skills needed to communicate successfully. In addition, using these digital tools supports the learner's active participation and encourages them to be autonomous and take independent control over their learning process. Integrating the CALLA method of instruction in these lessons allows students to build higher-order thinking skills in ways that challenge and are relevant to the student. According to Herrera & Murry (2016), as a cognitive method, it emphasizes three learning strategies: cognitive, metacognitive, and social affective. Where according to some research, speakers from other languages also develop cross-linguistic skills. ESL teachers need to understand the multiple ways in which the CALLA approach and digital tools can lead to a more communicative classroom. Consequently, this project provides an example of a didactic unit that contains two lessons aimed to develop reading and writing skills in ESL students, and assist teachers in acquiring digital skills that can lead them to create their lessons to teach virtually or integrate technology in their classrooms.

Dedication

  I am dedicating this thesis to three beloved people who have meant and continue to mean so much to me. Although one of them is no longer in this world, his memories continue to regulate my life. First and foremost, to my maternal grandfather Reynaldo Caicedo whose love for me knew no bounds and taught me the value of hard work. Thank you so much, "Abu" I will never forget you.

  Next, to my husband, Julian, who has been a constant source of support and encouragement during graduate school and challenges in my life. I am genuinely thankful for having you in my life.

  Last but not least, this work is also dedicated to my mother, Fabiola, who has always loved me unconditionally and whose good examples have taught me to work hard for the things that I aspire to achieve.

Acknowledgments

I want to express my sincere gratitude to my supervisor, Dr. Michelle Plaisance, for her enthusiasm, patience, meaningful comments, helpful information, practical advice, and unceasing ideas that have helped me tremendously during my research and writing of this thesis. Her immense knowledge, profound experience, and professional expertise in ESL education have successfully enabled me to complete this research. Without her support and guidance, this project would not have been possible. I could not have imagined having a better supervisor in my study.

I also wish to express my sincere thanks to Greensboro College for accepting all the other international students in the TESOL program and me allowing us to grow professionally and enrich our exchange experience with the TESOL Master Degree program.

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Chapter 1: Introduction

Through the years, the ESL population is growing significantly in the K-12 school setting. A study conducted by Fitzgerald (1995) showed that about 2.3 million students in the United States had been identified as having Limited English Proficiency (LEP). The number is expected to increase by 70 percent by the year 2030. Each year, teachers need to help them adjust to a new culture, language, and community. In addition, teachers face so many challenges, from updating their teaching to adapting to recent trends in education and, since last year, getting used to teaching virtually. Before the pandemic, teachers have been integrating technology in their curriculum and lesson delivery to motivate and engage students. However, it was not consistent in daily practices since it is a challenging tool for many educators. As a result, many researchers have done some research on computer-assisted language learning (CALL). Computer-assisted language learning programs are effective in many language-learning studies (Asoodeh, 1993). Those studies showed that students show more growth when learning using CALL programs than those who learn in a traditional way. CALL, in addition, offers a great way to differentiate and allow students to learn at their own pace.

Peregoy and Boyle (2016) explain how technology in the classroom can help students to motivate and work collaboratively using wikis or blogs. Students can benefit from having the opportunity to express themselves and provide different points of view. Some students are shy and usually do not participate in class. Technology offers them a place where they can show what they know in so many ways.

As a result, teachers faced a challenge with the pandemic by adjusting the planning and implementing their lessons as becoming comfortable with Remote Learning. As time passes, we as teachers actively adapted and designed a new curriculum where technology had an essential part.

Virtual learning has been around for some years, and different institutions have developed their way to make it possible for students worldwide to take classes and a degree by studying virtually. However, it is the first time Elementary levels are taught in this way.

Literacy development research in English learners in early ages is very little. However, some researchers, such as Edelsky (1981), found that reading and writing processes in native English speakers and English learners are very similar. Developing reading and writing processes is a complex process that takes a long time. Learners gradually integrate their English Language knowledge, world knowledge, and literacy skills such as letter sounds and blends to make sense and understand a text.

To design the unit, I will be using the Cognitive Academic Language Learning Approach, CALLA. According to Herrera and Murry (2016), the CALLA explicitly teaches metacognitive strategies that allow ESL students to comprehend understand and develop second language acquisition and higher-order thinking skills. By developing metacognitive skills in students, they will be able to think about their thinking, monitor their learning, and recognize their own way to learn.

As a result, this thesis project aims to create and share a didactic literacy unit that integrates lessons of reading and writing development skills, the CALLA method, and CALL tools. This unit is designed to demonstrate how teachers can enrich their instruction and lesson delivery with young learners while teaching virtual to motivate and enhance students' learning.

The main topic of the unit is: living things' life cycle. The unit has two lessons, one focused on reading and the second one focused on writing. The lessons are created on the Seesaw website to allow students to access and show their knowledge easily.

Apart from creating a literacy unit in virtual learning environments for ESL elementary students, this project also aims to motivate teachers to continue collaborating and create new material that can be used in Virtual learning environments with ESL students. Virtual teaching in elementary levels was perceived for many teachers worldwide as challenging since motivating and engaging young learners through a computer screen was not easy. However, through the path, we found out that technology is an incredible tool that we need to explore and use in our daily routine because it helps teachers improve their teaching practices and positively influence ESL learners' processes. In conclusion, this unit has been designed using research to have validity for the implementation in the ESL elementary population.

Chapter 2: Literature Review

During the last century, technology has gained a big part in human life. Many teachers worldwide have worked hard to find different ways to use technology in the classroom to engage, motivate, and improve their lesson delivery and students' learning. Since Computer Assisted Language Learning (CALL) was created, ESL teachers have designed more alternatives and tools to enhance learning. Consequently, web 2.0 tools were developed, and teachers from different teaching levels have used them to create and share student-centered projects and products, O' Malley, J. M., & Chamot, A. U. (1990). By using these tools, students benefit from interacting and learning from the online material while being engaged and motivated through activities that involve higher-order thinking skills, such as summarizing information and giving opinions. With web 2.0 tools like twitter, blogs, and wikis, students are immersed in the ICT world, where learners are motivated to continue learning and sharing knowledge with other students worldwide. In the same way, students are engaged in online discussions inside and outside the school.

For many years, CALL has been used in second language teaching and learning. According to Levy (1997), CALL is defined as the use of the computer in language teaching and learning. Later, Figueroa (2015) described web 2.0 as the evolution of CALL. Students are immersed in authentic contexts and tasks while developing listening, speaking, writing, and reading skills. He stated, "This type of CALL opened the door for the use of the Web 2.0 and social media as a strategy for enhancing the teaching and learning process in the ESL classroom" (Figueroa, 2015, p. 109).

During the pandemic, teachers were challenged to implement different web 2.0 tools to deliver their lessons in all levels of education. Even though those tools were not standard in the early ages of education, students and teachers started to develop technical skills to teach and learn virtually. During the quarantine, remote learning) was an accessible option for schools and teachers to provide instruction and experience learning from other places than school.

This chapter will walk through the research done about integrating technology through web 2.0 tool in the ESL learning process, focusing on literacy skills using the CALLA method. First, I will explain CALL (computer-assisted language learning) and Web 2.0 tools and discuss some studies demonstrating their advantages in ESL learning. Then, I will define the CALLA method and its benefits in teaching literacy at elementary education levels. Consequently, I will discuss some research and studies that explain how CALLA, as a cognitive method, can engage and foster literacy skills in beginner ESL and how technology positively impacts education. Finally, I will conclude by discussing the benefits and obstacles of remote teaching and learning in an elementary classroom.

CALL and Web 2.0 Tools

Levy (1997) defined CALL as "the search for and study of the application of the computer in language teaching and learning (p, 1)." CALL has been evolving since the 1960s, when it first was introduced in the education field, to continue constantly expanding as technology advance every day (Ahmad et al., 1985). Uzunboylu and Ozcinar (2009) described CALL as a tool, not a method that provides lessons where students can interact and have individualized learning.

CALL programs in language learning education "create independent and collaborative learning environments and provide students with language experiences as they move through the various stages of second language acquisition" (Kung, 2002, p. 30). According to Lee (2000), CALL increases motivation and enhances students' achievement, helping them feel more independent and responsible for their learning process. In addition, CALL is accessible at any time, so students have the freedom to manage their time, interact with students worldwide, and have access to authentic language materials.

As an evolution of CALL, online learning and web 2.0 examples such as Blogs, Wikis, Moodle's and Facebook, offer several advantages for learners. With those online platforms, students can benefit from having an alternative learning environment, working, and collaborating with peers, as well as endless opportunities to practice learned skills. In addition, according to Wen (2003), the computer makes instruction delighted and accelerates students' understanding providing ongoing feedback from their teachers or instructors(Kannan & McKnish, 2000).

Research provides a broader view of the advantages of using CALL and web 2.0 in the classroom. For example, a study conducted by Feng et al. (2012) examined how social networks can be used in foreign language teaching. They argues the use of web 2.0 tools empowers learners to generate ideas and collaborate with others. Students were challenged to create videos about a topic given by the instructor and upload them, encouraging students to use their L2 and receive feedback from teachers and peers. Another finding was that students increase their social skills. Students in this study mentioned how they improve their English skills to interact and make friends from other parts of the world. Consequently, researchers such as Wen (2003), Feng et al. (2012), found that web 2.0 tools also motivate students to engage in non-instructional

activities outside their classroom to expand their learning, like watching authentic movies and listening to music in L2.

Tozcu and Coady (2004) researched the effect of teaching direct vocabulary learning using (CALL) on vocabulary knowledge, reading comprehension, and speed of word recognition. They found out that students who used the CALL program to learn vocabulary learned a significantly higher amount of words than those in the control group. Even though both groups of students showed progression in vocabulary learning, the students who learned vocabulary and word recognition through CALL showed better results in reading comprehension exercises.

Technology has open the door for changing and evolving the traditional ways to teach and learn. The use of CALL and web 2.0 tools in the classroom is more student-centered, where teachers are facilitators and advisors in the learning process. Teachers who use CALL as a resource to support the teaching of a second language can monitor students' participation and encouraging autonomy as a start point for students to interact with a larger community of study, developing critical thinking skills in a real-life context (Hapsari, 2012).

The CALLA Method in ESL Teaching

The CALLA method is a cognitive method of instruction developed by Chamot and O'Malley that explicitly teaches metacognitive, cognitive, and social/affective strategies to learners that they can apply in other contexts to be successful (Herrera & Murry, 2016). CALLA is a student-centered method, where ESL learners can use prior knowledge and strategies such as making inferences and monitoring comprehension of content area subjects. Initially, Chamot and

O'Malley (1987) designed CALLA for intermediate ESL students, but later, research suggested that it could be effective with beginners and English speaker students.

Herrera and Murry (2016) summarized the four foundational beliefs of CALLA: active learners are creative learners; cognitive strategies can be taught and learned; academic content achievement with learning strategy use and learning strategies can transfer to new learning context of content areas. Vandergrift (2002) also emphasizes the role of metacognitive strategies. To him, "metacognitive strategies are crucial because they oversee, regulate, or direct the language learning task, and involve thinking about the learning process." The awareness of metacognitive processes is essential for learners. Cognitive and metacognitive strategies allow learners to get the ability to reflect on what they know and what they do not know. It will enable them to connect their strategies for learning while engaged in a learning task that results in a critical self-assessment and evaluation of their learning process and goal achievements. O'Malley and Chamot (1990) pointed the importance of learning strategies for students: "students without metacognitive approaches are essentially learners without direction or opportunity to plan their learning, monitor their progress, or review their accomplishments and future learning directions (p.19)."

Chamot (2004) pointed some other benefits for teachers and students when using CALLA in instruction. He stated that teachers can assist students to build strong background knowledge and relate it to the new content in the second language and culture. In addition, students can develop language awareness skills and critical literacy through hands-on, inquiry-based, and cooperative learning tasks.

Cohen (2008) provided a summary of strategy instruction guidelines:

1- Introduce the purpose of strategy instruction explicitly to the learners.

2- Integrate strategy instruction with regular coursework.

3- Select material that is neither too easy nor too difficult.

4- Teach strategies that are most effective with language skills to be practiced.

5- Focus on one skill area (e.g., memorizing words) because, within each skill, there is a complex range of strategies.

6- Start instruction with a discussion of what it is like to (read, write, listen or speak) in one's native language.

7- Raise awareness of the strategies learners are already using.

8- Teach strategies in the beginning level as well as to more advanced students.

9- Do not try to teach many strategies at the same time.

10- Model the strategies for students by thinking aloud about your own mental strategies.

11- Provide multiple practice opportunities to help learners move towards autonomous use of the strategies through gradual withdrawal of the teacher scaffolding.

12- Make the instruction explicit. Mention the strategies by name. Give the strategies names in the target language.

13- Practice the strategies throughout the school year.

14- Get learners to monitor and evaluate the effectiveness of the strategies used and their efforts to transfer them to new tasks. (p. 49)

Chamot (2009) proposed that CALLA method lessons follow a five-phase instructional sequence: preparation, presentation, practice, evaluation, and expansion. This instructional sequence provides appropriate scaffolding that gradually releases independence to the student from the teacher (Chamot 2007, pg. 307) (Figure 2.1).

Consequently, students can use the strategies learned and apply them to complete tasks.

A detailed framework sequence was proposed by Chamot and O'Malley (1990, p .158)

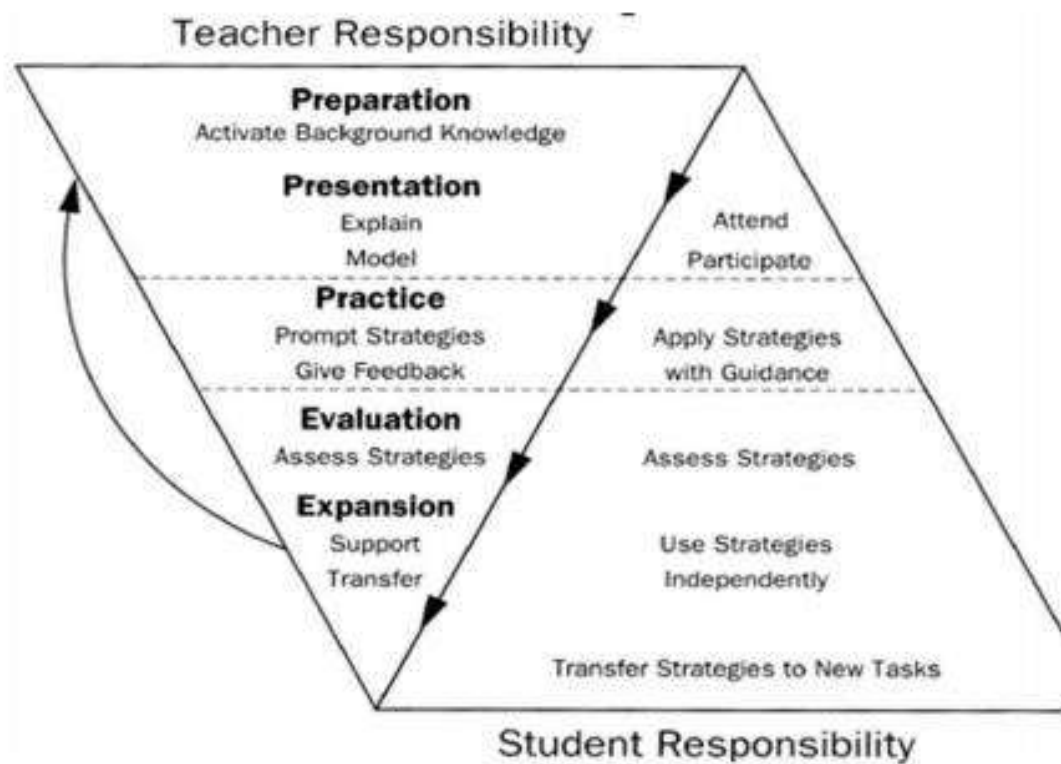and lately adapted by Abdul-Reheem Amin (2011, pg. 7) (Figure 2.2).

Figure 2.1: Student- Teacher responsibility progression

Stage	Aim	Seps
Preparation	Develop student awareness of different strategies through:	1-small group retrospective interviews about school tasks 2-modeling think-aloud, then having students think aloud in small groups. 3-discussion of interviews and think-aloud.
Presentation	Develop student knowledge about strategies by:	1-providing rational for strategy use. 2-descriping and naming strategy. 3-modeling strategy.
Practice	Develop student skills in using strategies for academic learning through:	1-cooperative learning tasks. 2-think-louds while problem solving. 3-peer tutoring in academic tasks. 4-group discussions.
Evaluation	Develop student ability to evaluate own strategy use through:	1-writing strategies used immediately after task. 2-discussing strategy use in class. 3-keeping dialogue journals (with teacher) on strategy use.
Expansion	Develop transfer of strategies to new tasks by:	1-additional practice on similar academic tasks. 2-assignments to use learning strategies on tasks related to cultural backgrounds of students.

Figure 2.2: Phases of the CALLA method

The significance of the CALLA method in ESL has been recognized and widely used by researchers and teachers. Many investigations show the importance of directly teaching cognitive strategies making language learning more efficient (Chamot and O'Malley, 1990; Abdul-Reheem Amin, 2011). Analyzing, summarizing, and giving opinions to strengthen higher-order thinking

skills has been widely discussed through researchers (Peregoy & Boyle, 2016; Wey et al, 2014; Chamot, 2004).

A case study done by Wey et al. (2014) explored how multimedia software can be incorporated to teach beginning-level ESL learners metacognitive writing strategies. The CALLA method was implemented with graphic organizer software. Their findings showed that the technology-supported software and the CALLA brought multiple benefits to learners. First, students showed improvement in their writing skills from the pretest and post-test. Second, brainstorming and organizing information in concept maps using the software showed a better performance. Finally, they also noticed higher student motivation, engagement when using planning and organizing strategies to write a text.

Abdul-Reheem Amin et al. (2011) conducted research: *the effectiveness of using an explicit language learning strategy-based instruction in developing secondary school students' EFL listening comprehension skills*. Their study used the CALLA method in listening comprehension activities and used a listening comprehension test to measure students' listening development with the lessons. In the end, they found out that the experimental group achieved more gains in their EFL listening comprehension skill and each sub-skill due to using the explicit language learning strategy instruction.

Second Language Reading and Writing

Researchers over the past years have investigated early literacy development in first language (Peregoy & Boyle, 2016; Herrera & Murray, 2016). Some researchers have found that English reading and writing development processes are very similar between both English learners and English speakers (Hudelson, 1984; Urzua, 1987). In other words, when learning to

read, students gradually start using their English language knowledge, print concepts, and new vocabulary to make sense of a text. Then, in writing, they use their developing English language knowledge, print concepts, and new vocabulary to put their ideas on a paper (Herrera & Murray, 2016).

Consequently, reading and writing are complex processes for all learners, which takes a long period to develop, teachers gradually scaffold and guide students to master those skills. Second language learners use their background knowledge to develop ideas and use the writing process similarly to English speakers. To facilitate and guide English learners in writing it is essential to model a writing process: pre-writing, drafting, revising, editing, and publishing (Herrera & Murray, 2016). It makes the writing process easier, helps ESL learners organize ideas, and breaks the writing task into small pieces to build sentences and then paragraphs with sense. Not following or guiding students in the writing process makes it difficult and unsuccessful because learners struggle to put together all their ideas simultaneously, making sense with them, checking on grammar, etc. (Peregoy & Boyle 2016).

Herrera and Murray (2016) presented many writing examples from beginner and intermediate ESL learners to illustrate what these students can do according to their level. Using pictures, wordless books, journals, freewriting and pre-writing brainstorming using mind maps are some of the strategies the authors suggested fostering writing skills in those ESL levels. Engaging students in collaborative and cooperative activities in the classroom is another strategy that allows learners to develop social/emotional and communicative skills where they have to use language in real-life situations to share an opinion, discuss and solve a writing task, (Peregoy & Boyle, 2016). Working in teams gives students self-esteem and confidence to give and receive feedback from their peers and do not feel afraid to try again (Herrrera & Murray, 2016).

In this same way, researchers have found that reading processes are similar in English speakers and English learners (Hudelson, 1981). Studentsuse their previous knowledge of symbols, sounds, and grammar to infer meaning. Peregoy and Boyle (2016) highlighted the importance of metacognition in the comprehension processes. Providing explicit instruction on metacognitive strategies helps students to understand and process information and new knowledge. Peregoy and Boyle (2013) also discussed the "new literacy" of internet reading. The use of the internet and technological apps in reading for English learners offers several scaffolds to comprehension. Students can read further information from a topic by only following a link, using pictures, videos, and music to support their learning. Some strategies used to engage beginning learners are reading stories that they may already know in their L1 language to transfer their previous knowledge and comprehend a text. In addition, the authors emphasized that students should select their books and share their understanding in groups. Teachers can use various formal and informal assessments to check continuous growth to differentiate instruction according to students' needs (Peregoy & Boyle 2016).).

Challenges to Virtual Learning

In this chapter, I have discussed the advantages of using technology and the CALLA method in teaching reading and writing to ESL students. However, it is essential to understand that some challenges may arise with implementing this method with technology. It is possible to find students with low computer skills more frequently in elementary school since most students have not had access to a computer before (Archambault, L. M., 2011). During the pandemic that there were parents who have never used a computer, so training students and parents can be a little overwhelming. For some students and families, providing access to technology without

digital skills training was like giving someone a book but failing to teach them how to read (Archambault, L. M., 2011). Teachers must spend time building digital and technological skills in the classroom, such as download apps, workspaces, login zoom meetings, and platforms to submit their work. In addition, it is crucial to involve parents, training them in the use of technological skills for them to be involved in their children's learning process and support them from home (Herrera & Murray, 2016).

Another challenge teachers can face is the lack of technological skills and professional development in virtual education. To be successful teaching virtually, teachers need to be comfortable with the content they are teaching, the technology used to deliver instruction and develop strong online teaching skills (Archambault, 2011). A case study conducted by Archambault (2014) showed some teachers' perceptions about virtual teaching. They said it was a big struggle with the learning transition from face-to-face teaching to online learning and learning how to use the workspace to deliver instruction, all the tools and understanding apps suggested by the board of education. For many educators, using technological tools was time-consuming and was more challenging than teaching face to face. However, with time and practice, teachers and students felt more comfortable working virtually and embraced the benefit of all the great tools virtual learning provides them.

Conclusion

Today more than ever, school systems and educators have seen the importance of implementing technology in lesson delivery as part of their daily routine in every school grade level. The use of technology tools in ESL promotes language learning as well as social-emotional opportunities among students. This chapter discussed how technology integrated with

the CALLA method could be an excellent way to develop reading and writing skills in ESL students bringing endless material to support learning by building a bridge between home and school. Many experts who demonstrated numerous benefits to remote teaching and gave examples of how to integrate technology in reading and writing teaching supported this finding. Online learning provides many opportunities to develop language skills, especially reading and writing, with authentic material and cultural contexts. In addition, students and teachers can benefit from using different apps such as Seesaw to engage, motivate and improve language skills, as well as to give and receive feedback individually. Knowing the benefits technological tools provide in learning is necessary for teachers and administrators to get the training required to succeed in this new reality.

Chapter 3: Project Design

In this chapter, I explain the rationale behind the creation of the four lessons for ESL beginner students to develop reading and writing comprehension skills at the elementary level of education. These lessons have been created to be an additional resource for teachers in this new remote learning where technology is no longer an option. Teachers nowadays have to include technology as part of their daily routine to build skills students can use every time they have remote learning.

For ESL students, all four language skills can be very hard or challenging considering that they may differ from their native language system. For beginner students, reading can be difficult since the expectation in the early stages is that the student processes the information and can explain his understanding verbally or written. According to Peregoy and Boyle (2016), background knowledge is crucial to help students understand a text. Using fairy tales and stories students may be familiar with, integrating metacognition strategies to teach students to analyze their ways of learning and understanding and graphic organizers to organize and synthesize information can facilitate English learners' comprehension.

On the other hand, engaging students in writing tasks can be challenging for them due to their low vocabulary and language knowledge. However, researchers have demonstrated that students can be engaged in reading and writing before becoming proficient in their second language (Goodman et al., 1979; Hudelson, 1984; Peregoy & Boyle, 1991). To help students to feel comfortable and do not become frustrated over writing tasks, Peregoy & Boyle (2016) gave

some writing phases and strategies to engage them in writing activities. These phases break the task into small parts that are easy to manage for students, instead of juggling their budding ideas with spelling, grammar, and syntax. Brainstorming, mapping, pictorial and oral activities are great for developing ideas to flow into sentences and paragraphs. Students can receive feedback from the teacher and their peers, allowing them to work collaboratively.

The covid pandemic showed many of us that we are not well prepared for virtual teaching. However, educators and schools systems could adapt and do their best to continue supporting students and parents. As a result, understanding the challenges students have to develop reading and writing skills using web 2.0 tools, this project provides a resource that integrates technology and the CALLA method to better benefit and meet students' needs. Using the Seesaw lessons I have created, teachers will be able to access, assign and modify them according to their teaching or plan to bring to the classroom. Educators can also provide differentiated instruction and individual feedback. While using web 2.0 tools, students will be engaged and motivated in meaningful activities in which they have access to authentic materials and be able to go beyond with only one click. There are four activities, (a) 2 reading activities; (b) 2 writing activities for writing development based on the previous reading. The reading comprehension and writing activities included in this unit are supported by the CALLA method and the research done about the use of technology in teaching English as a second language and reading and writing. Each lesson contains the following items: (a) objective; (b) preparation phase; (c) presentation activity; (d) practice activity; (e) self-evaluation activity; (f) expansion activity. Using the CALLA method, students can benefit from acquiring language skills and learn how to monitor their comprehension because they can apply in other contexts or content areas (Chamot, 2009).

With web 2.0 tools, my goal is to provide an idea of integrating technology and the CALLA methods in reading and writing activities to facilitate remote learning and teaching, providing the skills students need to learn from home. Through these lessons, teachers will get a source and guide on teaching ESL students successfully using technology and teaching virtually. This project can create and propose future teaching delivery to develop all the skills, not only reading and writing.

Chapter 4: The Project

This project focuses on creating two lessons to foster reading and writing skills through web 2.0 tools in remote learning. These lessons follow the CALLA method of instruction to build metacognitive learning skills that students can apply in other content areas. By explicitly teaching and using metacognitive strategies, students can build higher-order thinking skills, promote second language development, and increase their achievement using the skills taught (Herrera & Murry, 2016).

During the pandemic, teachers suddenly had to adapt their teaching strategies and techniques to a virtual setting. As educators, it is essential to understand the importance of implementing technological tools daily to prepare for future conditions and prepare my students for the world they live in. Many people nowadays work from home and need those technological skills to be successful.

The lesson plans and activities will be available in the web 2.0 tool seesaw **"collection page"** (Figure 4.1) on the website

https://app.seesaw.me/#/activities/library?collection=prompt_collection.17859d27-378f-432e-8954-44643cf8618a

This app-based platform motivates and engages students from all ages. It is easy to use for teachers and students. While teaching and learning remotely, students can show their knowledge using various media, from photos and videos to drawings, text, links, and PDFs. When students complete their tasks, teachers can grade them and make comments and return

them in case students have to go back and make some corrections. In addition, teachers can share

students' work with parents and guardians.

Figure 4.1: Collection Page

Teachers will find the unit named reading and writing ESL on the collection page,

created to foster reading and writing skills in elementary beginner students. The first lesson's title

is *All About Plants. Life Cycle of a Plant* (Figure 4.2), consist of 12 slides that include videos,

interactive activities, reading and writing tasks, graphic organizers, and expansion resources.

Teachers will also have access to the complete lesson plan by following the link on the teacher

notes site on the bottom left part of the activity.

The lesson plan follows the CALLA method developed by O'Malley and Chamot (2009).

The activities are designed to provide audiovisual resources and different tasks to promote

reading and writing skills. Students can benefit from taking pictures, recording, or drawing using this web 2.0 to show what they learned during the lesson.
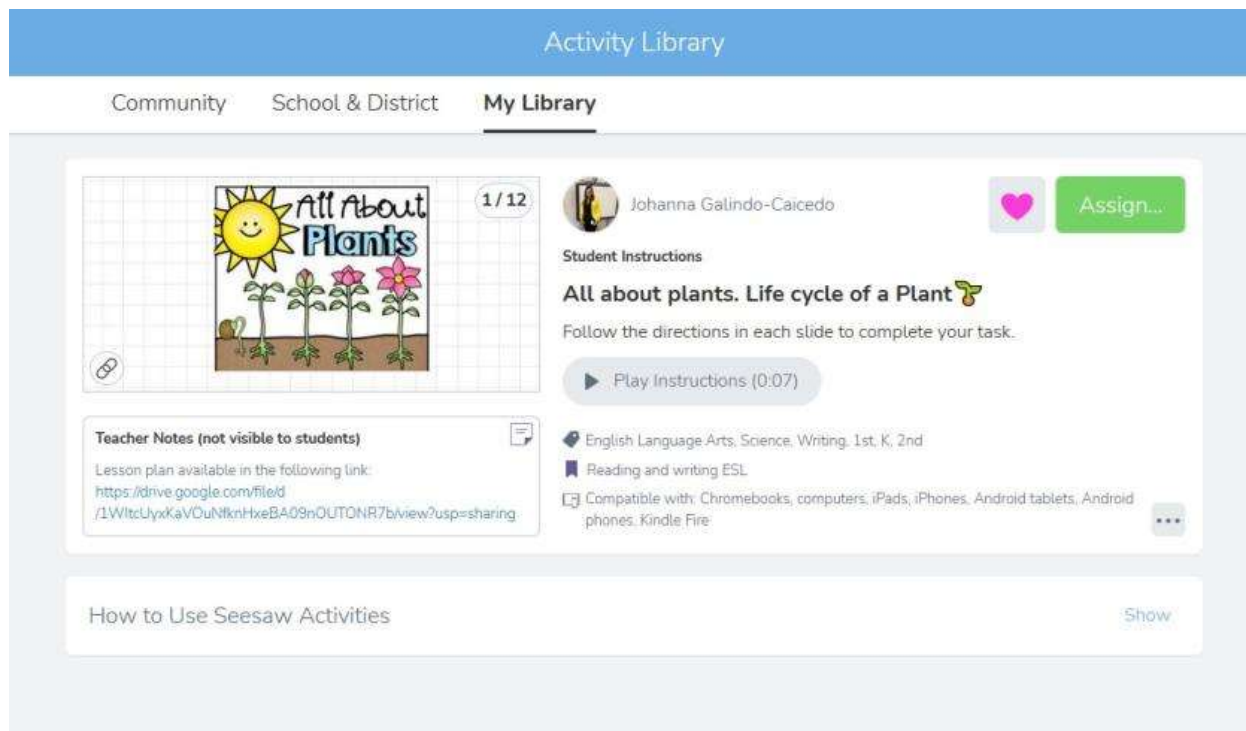

Figure 4.2: Lesson All About Plants

The screen is divided into three main parts. The first one shows the cover of the lesson with the number of slides. The second is the teacher notes, which I used to share the lesson plan. The third part is the student instructions, where teachers can either type or record them.

The lesson activities provide a complete selection of tasks to engage students in reading and writing through a science lesson. This lesson is about the life cycle of plants. The five steps in the CALLA method are integrated: preparation, presentation, practice, assessment, self-evaluation, and expansion. The preparation phase consists of a song and a circle map to recall

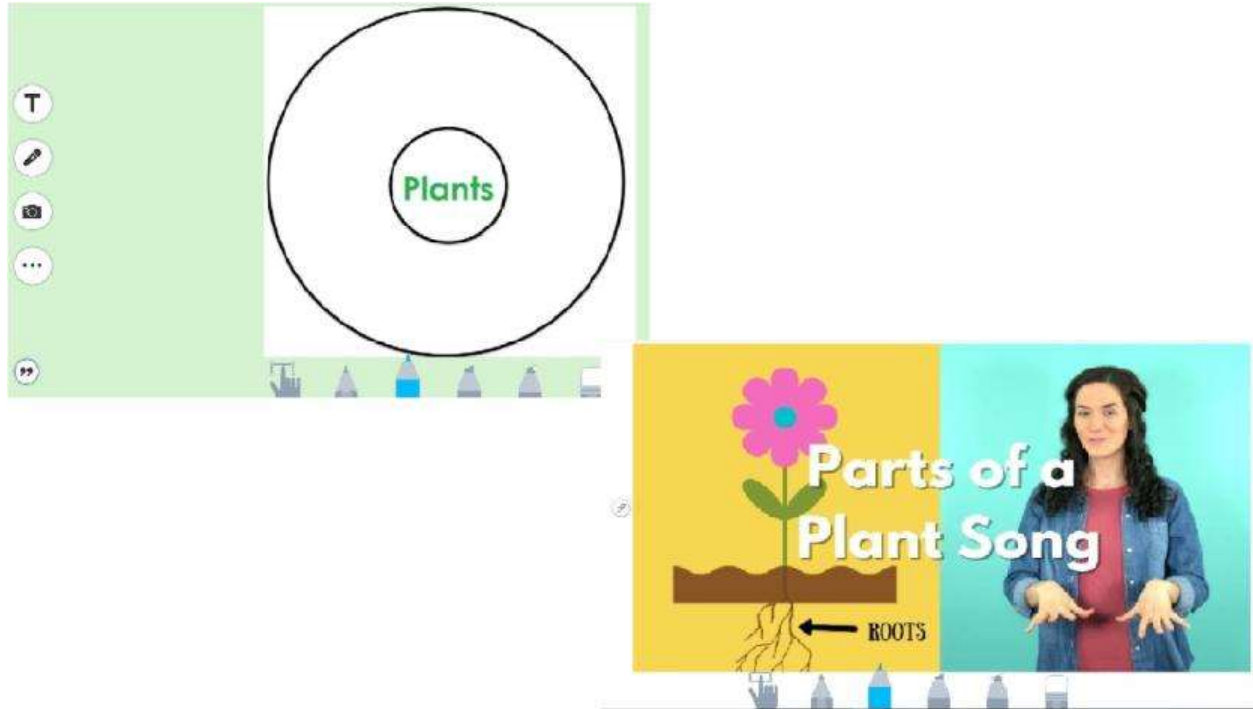previous knowledge about the topic (Figure 4.3).

Figure 4.3: Preparation

The presentation phase includes a pictographic vocabulary chart, a book to listen to and read, and a comprehension activity about the book. The book is linked to a webpage https://www.kidsa-z.com/main/Login/reset/student, where students can listen, read, and record themselves reading aloud. Teachers can take advantage of this program to track students' fluency and reading comprehension (Figure 4.4).
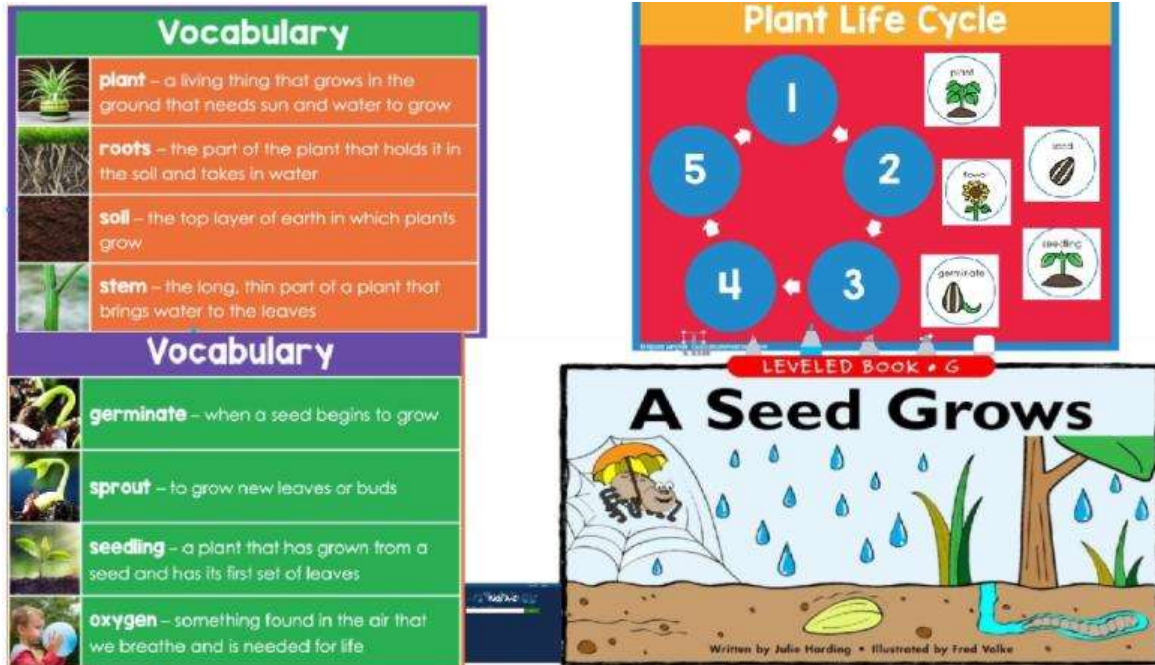
Figure 4.4: Presentation

Consequently, the practice phase contains a read and match sentences with the correct image, a writing activity describing the plants' life cycle with the students' own words. There are pictures in this activity to support students' writing. Students can also record themselves retelling the plant life cycle (Figure 4.5).
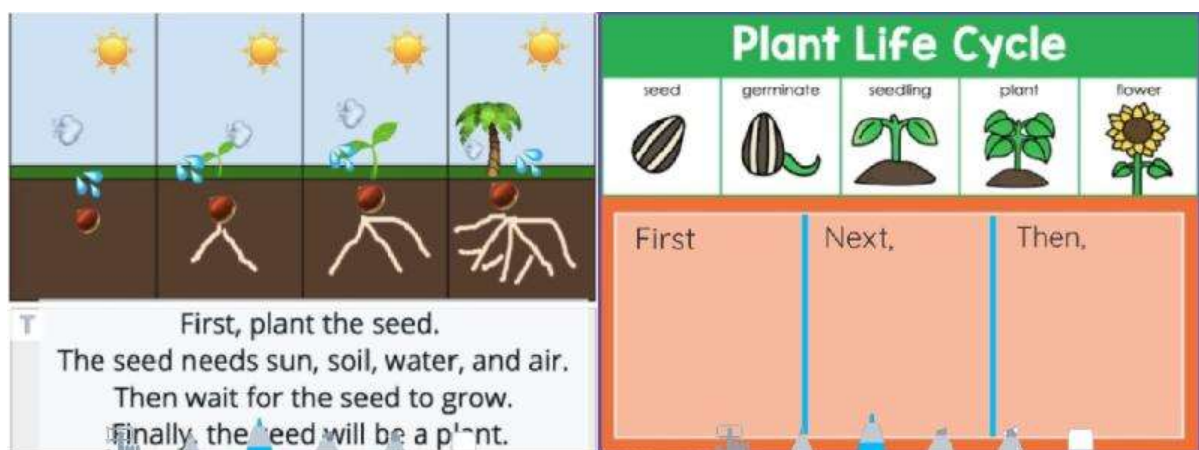

Figure 4.5: Practice

In this lesson, the writing activity in the practice step will count as the assessment. Students are asked to write five sentences explaining the life cycle and record themselves explaining it.

One of the most significant parts of the CALLA method is self-evaluation, when students can reflect and think about what they learned through the lesson. It helps them to feel responsive to their learning and track their progress. I added a slide called "What I learned." Here, students will write, draw or record their new knowledge (Figure 4.6).

Figure 4.6: Self-evaluation

Finally, as an expansion, students will have to create their own life cycle mini book and take pictures of their work. They will need to draw but also to write to describe their changes through their lives.

The second lesson's title is **"Fun learning about frogs."** This lesson continues the previous one, providing more profound knowledge into living things life cycles engaging students in reading and writing activities. This lesson includes the five steps O' Malley and Chamot (1990) described in the CALLA method.

In this lesson, the preparation phase includes a video to recall previous knowledge and a puzzle where students need to put together an image and a sentence. This game has audio to help students with pronunciation to read the whole sentence when it is complete (Figure 4.7).

Figure 4.7: Preparation

The presentation phase contains a read-aloud book, a puzzle to check on reading comprehension, and fill in the blanks passage to reinforce the vocabulary and the information learned from the book. A variety of activities motivates and engages students, who will benefit from reading comprehension tasks to practice new knowledge and vocabulary (Figure 4.8).
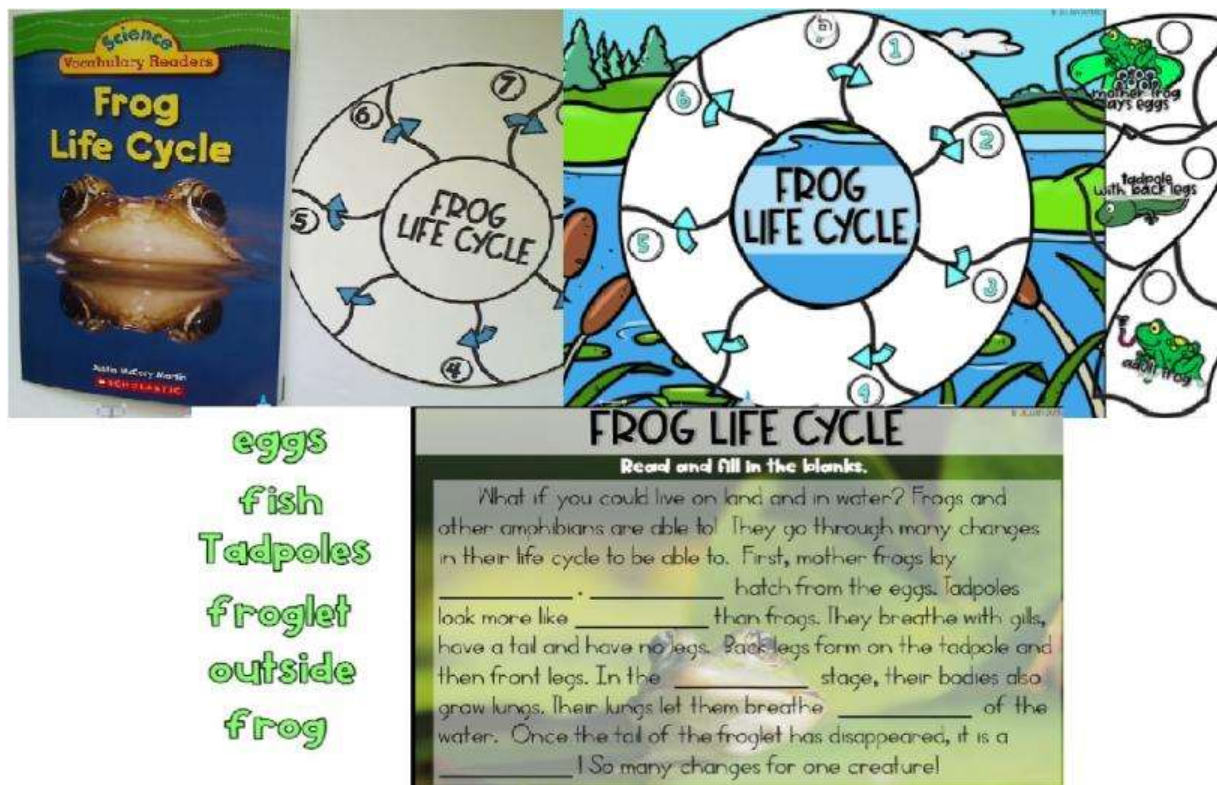

Figure 4.8: Presentation

The practice phase includes activities to complete a graphic organizer about the topic. Metacognitive strategies include using mental maps to help students organize information to understand a topic from global to narrow and analyze different processes, in this case, the frog's life cycle.

For students to self assess, they need to use their creativity to create their frog and create a story about its life, describing each step of its life cycle. Students will also record themselves reading their stories.

Finally, the self-assessment and expansion follow the same pattern as the previous lesson by asking students to complete a "What I learned chart" and some links to learn more about other animals' life cycles.

As I said before, teachers will find a third link called "Teacher notes" on the web page where teachers could use the lesson plan to work in class and use personalized learning to deliver each lesson. I can also guide if it needs to be adapted to a different context according to the students' levels and needs. The lesson plan describes all the activities and resources attached to virtual classrooms or can be easily adapted to face-to-face instruction with ELLs and newcomers (Figure 4.9).

All about plants	
Students	First Grade ESL
Duration	50 minutes
Standards	RL.1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson. RL.1.7 Use illustrations and details in a story to describe its characters, setting, or events. RL.1.10 With prompting and support, read and understand the literature of appropriate complexity for grade 1 for sustained periods of time. RI.1.2 Identify the main topic and retell key details of a text. RI.1.7 Use the illustrations and details in a text to describe its key ideas. W.1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide closure. a. With guidance and support from adults, organize information and ideas around a topic to plan and prepare to write. 1.L.1.1 Recognize that plants and animals need air, water, light (plants only), space, food, and shelter and that these may be found in their environment.
Content Objectives:	• Students will organize various tasks/activities using sequential order. • Students will use sequence vocabulary (first, second, next, then, and last) to organize tasks in sequential order.
Language Objectives:	• Students will read the information to determine sequential order. • Students will record themselves presenting their task/activity in sequential order using sequence vocabulary.

	• Students will write 3 out of five sentences describing the plant cycle steps.
Materials:	*A Seed Grows* by Julie Harding https://www.raz-plus.com/books/leveled-books/book/?id=82&langId=1 Computer Raz kids password and Username

Procedures	
Preparation	Students will brainstorm in a circle map what they know about plants. Next, they will listen to the song *"parts of a plant song."*
Presentation	1. The teacher will present the vocabulary. Students will read each definition, which is accompanied by a picture to help them understand better. Then, they will complete an activity about the plant parts. 2. Students will follow a link to the book *a seed grows*. Students will hear the story as often as needed and then practice reading by themselves and recording their read-aloud. 3. The teacher will retell the story using sequential pattern and sequence language (first, second, next, then, last). Students will organize the images in the sequence chart according to the book and the retelling.
Practice	1. Students are going to read four sentences. Each sentence is describing a step related to the plant cycle. 2. Each student will present his task in sequential order while using sequence language recording themselves.
Assesment	Students will write five sentences describing the plant life cycle.
Self-Evaluation	Students will complete a chart with the information they learned from this lesson.
Expansion	The students will create a 3-page book with a picture/drawing of themselves as a baby, one of themselves now, and one of how they think they may look in the future. Children will understand that sequencing can be used in many situations.

Fun learning about Frogs	
Students	First Grade ESL
Duration	50 minutes
Standards	RL.1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson. RL.1.7 Use illustrations and details in a story to describe its characters, setting, or events. RL.1.10 With prompting and support read and understand literature of appropriate complexity for grade 1 for sustained periods of time. RI.1.2 Identify the main topic and retell key details of a text. RI.1.7 Use the illustrations and details in a text to describe its key ideas. W.1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide closure. a. With guidance and support from adults, organize information and ideas around a topic to plan and prepare to write. 1.L.1.1 Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment.
Content Objectives:	• Students will organize various tasks/activities using sequential order. • Students will use sequence vocabulary (first, second, next, then, and last) to organize tasks in sequential order. • Students will identify and verbally/written share out prior knowledge of the frog life cycle. • Students will be able to listen for a purpose (sequence). • Students will be able to complete graphic organizers relating to the frog life cycle, as described in "Frog life cycle." • Students will be able to use a combination of drawing, dictating, and writing to display each part of the life cycle of a frog, creating a story.
Language Objectives:	• Students will be able to listen and read for information from the text relating to the sequence. • Students will complete interactive activities about the frog life cycle from prior knowledge and newly gained knowledge. • Students will be able to write a story describing the frog life cycle.
Materials:	*Frog Life Cycle* by Justin McCory Martin https://www.youtube.com/watch?v=Tscz-GF1eqU Computer
Procedures	
Preparation	Students will brainstorm in a circle map what they know about frogs.

	Then, students will watch a video and complete an activity about fun frogs' facts.
Presentation	Students will watch and follow the read-aloud of the book *Frog Life Cycle* by Justin McCory Martin. Students will complete a frog life cycle puzzle, read, and fill in missing words in a passage.
Practice	Students will complete two graphic organizers about the frog life cycle. Students will draw a tadpole or a frog and retell the frogs' life cycle steps verbally.
Assessment	Students will create a frog and write their frog's life story.
Self-Evaluation	Students will write some sentences about what they learned from this lesson.
Expansion	Students will access some links to learn about other animals' life cycles. Life cycle of a chicken Life cycle of a fly

Figure 4.9: Sample Lesson Plan

Chapter 5: Conclusions

Last year, all educators were "forced" to integrate technology into their daily teaching delivery due to the pandemic. It was an opportunity to discover new ways to engage, motivate, interact with students and try new tools to improve their teaching methods. As a result, both teachers and students have changed how they learn and teach, using new approaches to help them reach their goals. CALL and Web 2.0 tools increase motivation and enhance students' achievement by helping them feel more independent and responsible for their learning process. Thus, we can evidence how technology can benefit and expand ESL students' learning. These platforms also bring students the opportunity to become more autonomous in their learning process since it focuses on the learner, not the teacher, and helps them have an active role in taking responsibility of their learning. In addition, this integration will help them to work at their own pace and time.

Reading and writing skills are complex areas to teach beginner students due to the lack of vocabulary and background context, both of which need to be led by gradually scaffolding and guiding students to master those skills. Web 2.0 tools can better allow students to have access to different audiovisual, reading and writing materials to build their solid background knowledge and better understand the new content.

The integration of technology in the classroom will also help students who struggle with attendance issues due to different reasons: doctor's appointments, sports games, sickness, etc. These students will no longer miss school time since they will have the opportunity to catch up at

any time during the day. At the same time, they can learn at their own pace to re-read, analyze and better comprehend a topic, allowing them the opportunity to bemore successful in school.

As a Dual Language teacher, I had the opportunity to use Web 2.0 tools last school year and I noticed its benefits. At the beginning of the year, it was challenging to teach parents and students digital skills to complete all their activities and tasks. I was very motivated to create my lessons, develop content, create games, and implement interactive activities that call my students' attention and foster reading and writing skills. The response from my students and parents was positive; they learned how to read and write; most got on their grade level, never missed a school day, and most importantly, they displayed excitement and motivation in learning a new language. My own experience was the motivation to create this project, which includes a didactic unit with two lessons that follow the CALLA method and focus on developing reading and writing skills in elementary beginner students. Both classes are about living things and their life cycles. Each one contains linked videos, books to listen and read, comprehension activities, games, and writing tasks. I embeddedsome art in the writing task to motivate and engage my students. Due to the complexity of writing in early language stages, I thought it was fun to draw and write about it. For this project, I used the App Seesaw, which is kid-friendly and easy to use for my students. Using this tool, they could record, take pictures, write, draw and receive individualized instruction and feedback from me.

With the lessons I created in this project, I hope ESL teachers take the opportunity to check them out and try them in their classes, becoming technology users and allowing their students to learn in a student-centered environment. It is essential to highlight that this educational app is not complex to use; teachers who are not technology experts can easily create

their lessons, link videos, pictures, and books. These activities can also be modified accordi

the context and students' needs and where they will be used.

Last year's pandemic taught us the importance of learning and acquiring digital skills to

implement and use Web 2.0 tools in the classroom. Today, more than ever, school board

administrators and teachers need to understand the benefits of including technology in the

students' education process and providing the required professional development to train

educators in digital tools.

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